

APPLICANT(S): MERON, Gavriel et al.
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AMENDMENTS TO THE CLAIMS

Please amend the claims to read as set forth in the following Listing of Claims:

1-23. (Cancelled)

24. (Currently Amended) A method for displaying frames from an in-vivo image stream, the image stream comprising a series of frames captured in-vivo in a chronological order, said method comprising:

selecting a plurality of subsets of frames from the in-vivo image stream for display across a series of time slots;

for each subset, assigning ~~two or more scores~~ at least one score to each of a ~~plurality of frames~~ frame of the subset based on a degree of variation between a predetermined criterion of each frame and a predetermined criterion of ~~two or more~~ a reference frames frame; and

across a series of time slots, displaying at least a subset of the selected plurality of subsets of frames from the in-vivo image stream substantially simultaneously in each time slot, wherein the frames of the displayed subset of frames are positioned spatially in order of ascending or descending degree of variation based on the at least one score scores assigned thereto.

25. (Currently Amended) The method according to claim 24 comprising displaying the in-vivo image stream as a multi-frame image stream.

26. (Currently Amended) The method according to claim [[24]] 25 comprising adjusting a rate at which the multi-frame image stream is displayed based on the content of the frames.

27. (Cancelled)

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28. **(Currently Amended)** The method according to claim 24 wherein the score is ~~scores are~~ assigned based on a degree of color variation of the displayed frames as compared to the reference frames.

29–30. **(Cancelled)**

31. **(Currently Amended)** The method according to claim 24 comprising adjusting the size of at least one of the frames displayed based on the assigned score ~~scores~~.

32. **(Currently Amended)** The method according to claim 24 wherein the in-vivo image stream includes frames captured from more than one image sensor.

33. **(Currently Amended)** The method according to claim 24 comprising displaying sensor data from a sensor other than an image sensor substantially simultaneously as the frames from the in-vivo image stream.

34. **(Currently Amended)** A system for displaying frames of an in-vivo image stream, the system, the image stream comprising a series of frames captured in-vivo in a chronological order, the system comprising:

an in-vivo imaging device to transmit an in-vivo image stream;

a processor to select a plurality of subsets of frames from the in-vivo image stream for display across a series of time slots and for each subset assign at least one score ~~two or more scores~~ to each of frame of the subset a ~~plurality of frames~~ based on a degree of variation between a predetermined criterion of each frame and a predetermined criterion of ~~two or more~~ a reference frame ~~frames~~; and

a display to display across a series of time slots a multi-frame image stream, wherein each multi-frame image thereof displays at least a subset of the selected plurality of subsets of frames from the in-vivo image stream substantially simultaneously in each time slot, wherein the frames of the displayed subset of frames are positioned spatially in order of ascending or

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descending degree of variation based on the ~~seeres~~ at least one score assigned thereto.

35. **(Currently Amended)** The system of claim 34 wherein the in-vivo imaging device is an autonomous capsule.

36. **(Previously Presented)** The system of claim 34 comprising a pH sensor.

37. **(Previously Presented)** The system of claim 34 wherein the scores are assigned based on data detected by a sensor.

38. **(Previously Presented)** The system of claim 34 wherein the processor is to adjust the stream rate of the multi-frame image stream.

39. **(Currently Amended)** A method for displaying frames from an in-vivo image stream, the image stream comprising a series of frames captured in-vivo in a chronological order, the method comprising:

transmitting an in-vivo image stream;

selecting a plurality of subsets of frames from ~~[[an]]~~ the in-vivo image stream for display across a series of time slots;

for each subset, ~~assigning two or more seeres at least one score~~ to each of the ~~plurality of frames~~ frame of the subset based on a degree of variation between a predetermined criterion of each frame and a predetermined criterion of ~~a two or more reference frames~~ frame; and

across a series of time slots, displaying at least a subset of the selected plurality of subsets of frames from the in-vivo image stream substantially simultaneously in each time slot, wherein the frames of the displayed subset of frames are positioned spatially in order of ascending or descending degree of variation based on the at least one score ~~seeres~~ assigned thereto.

40– 41. **(Cancelled)**

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42. **(Previously Presented)** The method according to claim 39 wherein at least two of the plurality of frames are displayed having different sizes.

43. **(Currently Amended)** The method according to claim 39 wherein the score is ~~scores are~~ assigned based on color variation of the plurality of frames as compared to the reference frames.

44. **(Currently Amended)** The method according to claim 24 wherein ~~at least one of~~ the reference ~~frames~~ frame represents healthy tissue and wherein frames having a high degree of variation with respect to the healthy tissue reference frame are displayed to represent pathologies.

45. **(Currently Amended)** The method according to claim 24 wherein ~~at least one of~~ the reference ~~frames~~ frame represents a pathology and wherein frames having a low degree of variation with respect to the pathology reference frame are displayed.

46. **(Currently Amended)** The method according to claim 24 comprising selecting or generating the reference frame ~~frames~~.

47. **(Currently Amended)** The method according to claim 46 wherein selecting or generating the reference frame ~~frames~~ is based on the frame ~~frames~~ to be displayed.

48. **(Previously Presented)** The method according to claim 24 wherein the predetermined criterion is selected from the group consisting of: color, shape features, focusing, lighting, blood detection, and image content which may not be associated with a pathology.